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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,435	05/05/2004	Atsushi MINE	040191	3434

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EXAMINER

CHAN, EMILY Y

ART UNIT PAPER NUMBER

2829

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,435

Applicant(s)

MINE ET AL.

Examiner

Emily Y. Chan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-5, 7-12, 15 and 16 is/are rejected.
7) ☒ Claim(s) 13 and 14 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to because of the following informalities: in the claim, it is not specified where the contact surface portion is. Is it part of the probe card or part of the arch type probe? Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-5 and 7-9 are provisionally rejected on the ground of nonstatutory obvious double patenting over claim 1 of copending Application No. 10/709,629 in view of Hattori et US Patent No. 6,680, 536

With respect to claim 1 of the instant invention, the claim 1 of copending Application No. 10/709,629 expressly recites a probe card (a sheet unit) as claimed comprising a base plate and a probe.

The only difference between the claim 1 of copending application No. 10709,629 and the claim 1 of the instant invention is that the claim 1 of copending Application No. 10/709,629 fails to recite that the probe being a member in a shape of a half circle arc, formed on and supported at one end by the surface of the base plate and a second quarter circle arc portion which is connected to the other end of the first quarter circle arc portion and is a little shorter than the first quarter circle arc portion.

Hattori et al ('536) disclose a probe card (probe unit) (see Fig. 2D) comprising a base plate (1) and a probe. Hattori et al ('536) disclose their a probe (see Fig. 1C) being a member in a shape of a half circle arc, formed on and supported at one end thereof by a surface of the base plate (1), and having a top portion (6) located at almost the center of the probe serving as a contact surface for contacting with an electrode of a measurement objective. Hattori et al ('536) also disclose their probe has a first quarter circle arc portion (3 or the left side of the top portion 6) which is supported at one end (2) thereof by the base plate (1) and a second quarter circle arc portion (see Fig. 1D), the right portion of the top portion 6) which is connected to the other end of the first quarter circle arc portion (3) and shorter than the first quarter circle arc portion (3). Even though Hattori et al ('536) do not disclose that the second quarter circle portion is not a little short than the first quarter circle arc portion, Hattori et al ('536)'s second quarter circle portion still meets the claimed second quarter circle portion because it would have

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been obvious to one of ordinary skill in the art at the time the claimed invention was made to make the probe with the second quarter arc portion little shorter than the first quarter circle arc portion as desired because changing size and shape are generally recognized as being within the level of ordinary skill in the art (see MPEP2144.04(1), (IVA)&(IVB)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to incorporate the teaching of Hattori et al ('536) into the claim 1 of copending application No. 10709,629 to make the shape of the probe as claimed for the expected benefit of preventing an excessive force from being applied to the electrode, and the electrode is rarely damaged as disclosed by Hattori et al ('536) (see Col. 2, lines 63-64).

Regarding to claim 2 of the instant invention, Hattori et al ('536) disclose that a projected contact terminal (small projection 6) is provided at the top portion thereof.

Regarding to claim 3 of the instant invention, Hattori et al ('536) disclose that the distal end portion of the second quarter circle arc portion is spherical (see Figs 6A-6B and Col. 7, lines 46-53).

Regarding to claim 4 of the instant invention, Hattori et al ('536) disclose coating on the probe lead (2) and the small projection (6) of the their probe (see Col. 10, lines 12-15 and 64) which meets the claimed coating applied on the distal end surface of the distal end portion of the second quarter circle arc portion.

Regarding to claim 5 of the instant invention, Hattori et al ('536) disclose material necessary for raising a Young's modulus (see Col. 13, lines 11-13 "metal to be plated

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probe may be nickel or nickel alloy ... which gives proper rigidity and elasticity to each lead".

Regarding to claim 7 of the instant invention, Hattori et al ('536) disclose coating (insulated surface) is applied on a portion of a surface of the base plate (1) in contact with the distal end surface of the second quarter circle arc portion (see Col.8, lines 66-67).

With respect to claims 8-9 of the instant invention, the claims 4-5 of copending Application No. 10/709,629 recite a reinforcing member.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 10-12 and 15-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Hattori et al ('536).

With respect to claim 15-16, Hattori et al ('536) disclose a probe card (probe unit) (see Fig. 2D) comprising a base plate (1), a contact portion (3) and at least one arch type probe being mounted to the probe card (probe unit) and is distinguishable from a needle-like probe. Hattori et al ('536) disclose that their a probe (see Fig. 1C) has a shape of an arc, is formed on and supported at one end thereof by a surface of the base plate (1) and has a first arc portion which is supported at a first end thereof by the base plate and a second arc portion continuing from the second end of the first arc portion.

With respect to the method claims 10-12, since Hattori et al ('536) teach the claimed apparatus, it would have been obvious to one of ordinary skill in the art that

when using the apparatus of Hattori et al ('536), the claimed measuring step would have been expected to be performed (see rejection above with respect to apparatus claims 15-16).

Therefore, Hattori et al ('536) anticipate the claimed invention.

Allowable Subject Matter

4. Claims 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 13-14 are indicated allowable because the prior art in the record does not teach or suggest a second arc portion which is brought into contact with the base plate and slides when the contacting is performed as shown by Fig. 1.

Response to Arguments

5. Applicant's arguments with respect to claims 1-5 and 7-9 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Y. Chan whose telephone number is 571-272-1956. The examiner can normally be reached on 8:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha T Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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PRIMARY EXAMINER
A.U. 2829
08/07/06